



ELSEVIER

Chemical Physics 207 (1996) 499–502

Chemical
Physics

Author index to volume 207

- Abramczyk, H., see Kołodziejski, M. 207 (1996) 77
- Alagia, M., N. Balucani, P. Casavecchia, D. Stranges, G.G. Volpi, D.C. Clary, A. Kliesch and H.-J. Werner, The dynamics of the reaction $\text{OH} + \text{D}_2 \rightarrow \text{HOD} + \text{D}$: Crossed beam experiments and quantum mechanical scattering calculations on ab initio potential energy surfaces 207 (1996) 389
- Alexander, A.J., M. Brouard, S.P. Rayner and J.P. Simons, Product state resolved stereodynamics. $\text{O}(^1\text{D}_2) + \text{HCl} \rightarrow \text{OH}(X^2\Pi_{1/2}; v=4, N=6) + \text{Cl}(^2\text{P}_j)$ 207 (1996) 215
- Aoiz, F.J., L. Bañares, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe and J.P. Toennies, F- D_2 state resolved reactive scattering at 180 and 240 meV collision energies. II. Quasi-classical cross sections. A comparison with the experimental results 207 (1996) 245
- Aoiz, F.J., see Faubel, M. 207 (1996) 227
- Balucani, N., see Alagia, M. 207 (1996) 389
- Bañares, L., see Aoiz, F.J. 207 (1996) 245
- Bañares, L., see Faubel, M. 207 (1996) 227
- Bässler, H., see Deussen, M. 207 (1996) 147
- Bawagan, A.D.O., see Moghaddam, M.S. 207 (1996) 19
- Belikov, A.E., see Sharafutdinov, R.G. 207 (1996) 193
- Bolton, K. and S. Nordholm, Beats in internal vibrational energy redistribution in trans-stilbene – a study of the quantum and classical correspondence 207 (1996) 63
- Brion, C.E., see Rolke, J. 207 (1996) 173
- Brouard, M., see Alexander, A.J. 207 (1996) 215
- Buenker, R.J., see Cai, Z.-L. 207 (1996) 43
- Bulthuis, J., see Keijzer, F. 207 (1996) 261
- Buzza, S.A., see Snyder, E.M. 207 (1996) 355
- Cai, Z.-L., G. Hirsch and R.J. Buenker, Ab initio study of the electronic spectrum of Na_2F 207 (1996) 43
- Casavecchia, P., see Alagia, M. 207 (1996) 389
- Castleman Jr., A.W., see Snyder, E.M. 207 (1996) 355
- Che, D.-C. and K. Liu, Reactive scattering of $\text{CN} + \text{D}_2$: the stereodynamics 207 (1996) 367
- Clary, D.C., see Alagia, M. 207 (1996) 389
- Connor, J.N.L., see Sokolovski, D. 207 (1996) 461
- Costes, M., see Hedgecock, I.M. 207 (1996) 379
- Czuchaj, E., F. Rebentrost, H. Stoll and H. Preuss, Pseudopotential calculations for the potential energies of $\text{Ca}^+ - \text{He}$ and $\text{Ca}^+ - \text{Ne}$ 207 (1996) 51
- De Graaff, G.J., see Keijzer, F. 207 (1996) 261
- Deussen, M., P. Haring Bolivar, G. Wegmann, H. Kurz and H. Bässler, Electric field-induced photoluminescence quenching in molecularly doped polymer light-emitting diodes 207 (1996) 147
- Dogra, S.K., see Santra, S. 207 (1996) 103

- Dopfer, O., M. Melf and K. Müller-Dethlefs, Zero kinetic energy photoelectron (ZEKE) spectroscopy of the heterotrimer phenol–water–argon: interaction between a hydrogen bond and a van der Waals bond 207 (1996) 437
- Douhal, A., F. Lahmani and A.H. Zewail, Proton-transfer reaction dynamics 207 (1996) 477
- Draxler, S., see Hartmann, P. 207 (1996) 137
- Eland, J.H.D., see Hochlaf, M. 207 (1996) 159
- Faubel, M., B. Martínez-Haya, L.Y. Rusin, U. Tappe, J.P. Toennies, F.J. Aoiz and L. Bañares, F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. I. A high resolution crossed molecular beam experiment 207 (1996) 227
- Faubel, M., see Aoiz, F.J. 207 (1996) 245
- Fischer, I., M.J.J. Vrakking, D.M. Villeneuve and A. Stolow, Femtosecond time-resolved zero kinetic energy photoelectron and photoionization spectroscopy studies of I₂ wavepacket dynamics 207 (1996) 331
- Fronzoni, G. and A. Lisini, A theoretical investigation on the core processes of 1-alkenes 207 (1996) 1
- Garay, M., J.M. Orea and A. González Ureña, Reaction dynamics of the Ca(¹D₂, ³P₁) + RI → CaI* + R (R = CH₃, C₂H₅ and n-C₃H₇) system: chemiluminescence, photon yield, electronic branching ratio and influence of the radical group 207 (1996) 451
- González Ureña, A., see Garay, M. 207 (1996) 451
- Grice, R., see Wang, J.J. 207 (1996) 203
- Hall, R.I., see Hochlaf, M. 207 (1996) 159
- Haring Bolivar, P., see Deussen, M. 207 (1996) 147
- Hartmann, P., M.J.P. Leiner, S. Draxler and M.E. Lippitsch, Specific solvent effects of linear alcohols on the emission spectrum and the excited state decay of tris(2,2'-bipyridyl) ruthenium(II) 207 (1996) 137
- Hedgecock, I.M., C. Naulin and M. Costes, Crossed molecular beam study of the Cr(a⁷S₃) + O₂(X³Σ_g⁻) → CrO(X⁵Π_g) + O(³P_g) reaction 207 (1996) 379
- Hilgeman, M.H., see Keijzer, F. 207 (1996) 261
- Hirsch, G., see Cai, Z.-L. 207 (1996) 43
- Hochlaf, M., R.I. Hall, F. Penent, H. Kjeldsen, P. Lablanquie, M. Lavollée and J.H.D. Eland, Threshold photoelectrons coincidence spectroscopy of N₂²⁺ and CO²⁺ ions 207 (1996) 159
- Inoue, H., see Matsumoto, T. 207 (1996) 167
- Janssen, M.H.M., see Keijzer, F. 207 (1996) 261
- Keijzer, F., J.M. Teule, J. Bulthuis, G.J. de Graaff, M.H. Hilgeman, M.H.M. Janssen, E.H. van Kleef, J.J. van Leuken and S. Stolte, Reactions of Ca and Sr with CH₃X and CF₃X (X = Br, I). A laser-induced fluorescence study on nascent CaBr, SrBr, and Srl 207 (1996) 261
- Khmelniskii, I.V., see Makarov, V.I. 207 (1996) 115
- Kjeldsen, H., see Hochlaf, M. 207 (1996) 159
- Kliesch, A., see Alagia, M. 207 (1996) 389
- Köhler, G., K. Rechthaler, K. Rotkiewicz and W. Rettig, Formation and stabilization of twisted intramolecular charge transfer states in binary mixed solvents 207 (1996) 85
- Kolodziejski, M. and H. Abramczyk, Spectral properties of cationic transients generated in γ-irradiated cyclohexyl bromide 207 (1996) 77
- Kurz, H., see Deussen, M. 207 (1996) 147

- Lablanquie, P., see Hochlaf, M. 207 (1996) 159
- Lahmani, F., see Douhal, A. 207 (1996) 477
- Lavollée, M., see Hochlaf, M. 207 (1996) 159
- Leiner, M.J.P., see Hartmann, P. 207 (1996) 137
- Lippitsch, M.E., see Hartmann, P. 207 (1996) 137
- Lisini, A., see Fronzoni, G. 207 (1996) 1
- Liu, K., see Che, D.-C. 207 (1996) 367
- Loesch, H.J., A novel, simple rotational state analyser/selector for polar linear molecules 207 (1996) 427
- Ma, B. and H.F. Schaefer III, Singlet-triplet energy separation and barrier for ring closure for trimethylenemethane and its complexes 207 (1996) 31
- Makarov, V.I. and I.V. Khmelinskii, Magnetic field effect of the fluorescence of gaseous NO₂ excited to the ²B₂ and ²B₁ states 207 (1996) 115
- Martínez-Haya, B., see Aoiz, F.J. 207 (1996) 245
- Martínez-Haya, B., see Faubel, M. 207 (1996) 227
- Matsumoto, T. and H. Inoue, Colloidal structure and properties of bovine serum globulin aqueous systems using SAXS and rheological measurements 207 (1996) 167
- McKoy, V., see Wang, K. 207 (1996) 309
- Melf, M., see Dopfer, O. 207 (1996) 437
- Minton, T.K., see Nelson, C.M. 207 (1996) 287
- Moghaddam, M.S., A.D.O. Bawagan, K.H. Tan and W. von Niessen, Study of the electronic structure of pyridine by synchrotron photoelectron spectroscopy 207 (1996) 19
- Moore, T.A., see Nelson, C.M. 207 (1996) 287
- Müller-Dethlefs, K., see Dopfer, O. 207 (1996) 437
- Naulin, C., see Hedgecock, I.M. 207 (1996) 379
- Nelson, C.M., T.A. Moore, M. Okumura and T.K. Minton, Photodissociation of ClONO₂ at 193 and 248 nm 207 (1996) 287
- Nordholm, S., see Bolton, K. 207 (1996) 63
- Okumura, M., see Nelson, C.M. 207 (1996) 287
- Orea, J.M., see Garay, M. 207 (1996) 451
- Penent, F., see Hochlaf, M. 207 (1996) 159
- Preuss, H., see Czuchaj, E. 207 (1996) 51
- Purnell, J., see Snyder, E.M. 207 (1996) 355
- Rayner, S.P., see Alexander, A.J. 207 (1996) 215
- Rebentrost, F., see Czuchaj, E. 207 (1996) 51
- Rechthaler, K., see Köhler, G. 207 (1996) 85
- Rettig, W., see Köhler, G. 207 (1996) 85
- Rolke, J. and C.E. Brion, Studies of the electron density in the highest occupied molecular orbitals of PH₃, PF₃ and P(CH₃)₃ by electron momentum spectroscopy and Hartree-Fock, MRSD-CI and DFT calculations 207 (1996) 173
- Rotkiewicz, K., see Köhler, G. 207 (1996) 85
- Rusin, L.Y., see Aoiz, F.J. 207 (1996) 245
- Rusin, L.Y., see Faubel, M. 207 (1996) 227

- Santra, S. and S.K. Dogra, Solvatochromism and prototropic reactions of 2-quinoxalinone 207 (1996) 103
Schaefer III, H.F., see Ma, B. 207 (1996) 31
Schatz, G.C., see Sokolovski, D. 207 (1996) 461
Shapiro, M., Spectroscopic density-matrix imaging and potential inversion: the rotational effect 207 (1996) 317
Sharafutdinov, R.G., A.E. Belikov, M.L. Strekalov and A.V. Storozhev, State-to-state rate constants and rotational relaxation time in nitrogen 207 (1996) 193
Simons, J.P., see Alexander, A.J. 207 (1996) 215
Smith, D.J., see Wang, J.J. 207 (1996) 203
Snyder, E.M., J. Purnell, S. Wei, S.A. Buzza and A.W. Castleman Jr., Real-time dynamics of ammonia clusters excited through the \tilde{A} state: formation of the protonated cluster ions 207 (1996) 355
Sokolovski, D., J.N.L. Connor and G.C. Schatz, Centrifugal-sudden hyperspherical study of $\text{Cl} + \text{HCl} \rightarrow \text{ClH} + \text{Cl}$ reaction dynamics on 'tight-bend' and 'loose-bend' potential energy surfaces 207 (1996) 461
Stoll, H., see Czuchaj, E. 207 (1996) 51
Stolow, A., see Fischer, I. 207 (1996) 331
Stolte, S., see Keijzer, F. 207 (1996) 261
Storozhev, A.V., see Sharafutdinov, R.G. 207 (1996) 193
Stranges, D., see Alagia, M. 207 (1996) 389
Strekalov, M.L., see Sharafutdinov, R.G. 207 (1996) 193
Syage, J.A., State specific, angle velocity resolved measurements of photodissociation in clusters: I atom escape from $(\text{CH}_3\text{I})_n$ ($n = 1,2,3$) 207 (1996) 411
Tan, K.H., see Moghaddam, M.S. 207 (1996) 19
Tappe, U., see Aoiz, F.J. 207 (1996) 245
Tappe, U., see Faubel, M. 207 (1996) 227
Teule, J.M., see Keijzer, F. 207 (1996) 261
Toennies, J.P., see Aoiz, F.J. 207 (1996) 245
Toennies, J.P., see Faubel, M. 207 (1996) 227
Van Kleef, E.H., see Keijzer, F. 207 (1996) 261
Van Leuken, J.J., see Keijzer, F. 207 (1996) 261
Villeneuve, D.M., see Fischer, I. 207 (1996) 331
Volpi, G.G., see Alagia, M. 207 (1996) 389
Von Niessen, W., see Moghaddam, M.S. 207 (1996) 19
Vrakking, M.J.J., see Fischer, I. 207 (1996) 331
Wang, J.J., D.J. Smith and R. Grice, Role of migration in the dynamics of bromine atoms reacting with iodine molecules 207 (1996) 203
Wang, K. and V. McKoy, Rotationally resolved photoelectron spectroscopy of the vanadium dimer 207 (1996) 309
Wegmann, G., see Deussen, M. 207 (1996) 147
Wei, S., see Snyder, E.M. 207 (1996) 355
Werner, H.-J., see Alagia, M. 207 (1996) 389
Zewail, A.H., see Douhal, A. 207 (1996) 477

Subject index to volume 207

Methods

Theoretical

Classical mechanics

- F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. II.
Quasi-classical cross sections. A comparison with the experimental results, F.J. Aoiz, L.
Bañares, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe and J.P. Toennies 207 (1996) 245
- A novel, simple rotational state analyser/selector for polar linear molecules, H.J. Loesch 207 (1996) 427

Many body and quasiparticle approaches

- A theoretical investigation on the core processes of 1-alkenes, G. Fronzoni and A. Lisini 207 (1996) 1
- Study of the electronic structure of pyridine by synchrotron photoelectron spectroscopy,
M.S. Moghaddam, A.D.O. Bawagan, K.H. Tan and W. von Niessen 207 (1996) 19

Coupling schemes and perturbative treatments

- Centrifugal-sudden hyperspherical study of $\text{Cl} + \text{HCl} \rightarrow \text{ClH} + \text{Cl}$ reaction dynamics on
'tight-bend' and 'loose-bend' potential energy surfaces, D. Sokolovski, J.N.L. Connor
and G.C. Schatz 207 (1996) 461

Ab initio schemes for stationary properties

- Study of the electronic structure of pyridine by synchrotron photoelectron spectroscopy,
M.S. Moghaddam, A.D.O. Bawagan, K.H. Tan and W. von Niessen 207 (1996) 19
- Singlet–triplet energy separation and barrier for ring closure for trimethylenemethane and
its complexes, B. Ma and H.F. Schaefer III 207 (1996) 31
- Ab initio study of the electronic spectrum of Na_2F , Z.-L. Cai, G. Hirsch and R.J. Buenker 207 (1996) 43
- Pseudopotential calculations for the potential energies of $\text{Ca}^+ - \text{He}$ and $\text{Ca}^+ - \text{Ne}$, E.
Czuchaj, F. Rebertrost, H. Stoll and H. Preuss 207 (1996) 51

Computational and simulation methods

- Pseudopotential calculations for the potential energies of $\text{Ca}^+ - \text{He}$ and $\text{Ca}^+ - \text{Ne}$, E.
Czuchaj, F. Rebertrost, H. Stoll and H. Preuss 207 (1996) 51
- Rotationally resolved photoelectron spectroscopy of the vanadium dimer, K. Wang and V.
McKoy 207 (1996) 309
- A novel, simple rotational state analyser/selector for polar linear molecules, H.J. Loesch 207 (1996) 427
- Centrifugal-sudden hyperspherical study of $\text{Cl} + \text{HCl} \rightarrow \text{ClH} + \text{Cl}$ reaction dynamics on
'tight-bend' and 'loose-bend' potential energy surfaces, D. Sokolovski, J.N.L. Connor
and G.C. Schatz 207 (1996) 461

Molecular dynamics and scattering theory

- Beats in internal vibrational energy redistribution in trans-stilbene – a study of the quantum and classical correspondence, K. Bolton and S. Nordholm 207 (1996) 63
- Role of migration in the dynamics of bromine atoms reacting with iodine molecules, J.J. Wang, D.J. Smith and R. Grice 207 (1996) 203
- F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. II. Quasi-classical cross sections. A comparison with the experimental results, F.J. Aoiz, L. Bañares, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe and J.P. Toennies 207 (1996) 245
- Rotationally resolved photoelectron spectroscopy of the vanadium dimer, K. Wang and V. McKoy 207 (1996) 309
- Spectroscopic density-matrix imaging and potential inversion: the rotational effect, M. Shapiro 207 (1996) 317
- The dynamics of the reaction OH + D₂ → HOD + D: Crossed beam experiments and quantum mechanical scattering calculations on ab initio potential energy surfaces, M. Alagia, N. Balucani, P. Casavecchia, D. Stranges, G.G. Volpi, D.C. Clary, A. Kliesch and H.-J. Werner 207 (1996) 389
- State specific, angle velocity resolved measurements of photodissociation in clusters: I atom escape from (CH₃I)_n (n = 1,2,3), J.A. Syage 207 (1996) 411
- Centrifugal-sudden hyperspherical study of Cl + HCl → ClH + Cl reaction dynamics on 'tight-bend' and 'loose-bend' potential energy surfaces, D. Sokolovski, J.N.L. Connor and G.C. Schatz 207 (1996) 461
- Proton-transfer reaction dynamics, A. Douhal, F. Lahmani and A.H. Zewail 207 (1996) 477

Experimental*Raman spectroscopy*

- Spectral properties of cationic transients generated in γ-irradiated cyclohexyl bromide, M. Kołodziejewski and H. Abramczyk 207 (1996) 77

Visible and UV spectroscopy

- Spectral properties of cationic transients generated in γ-irradiated cyclohexyl bromide, M. Kołodziejewski and H. Abramczyk 207 (1996) 77
- Formation and stabilization of twisted intramolecular charge transfer states in binary mixed solvents, G. Köhler, K. Rechthaler, K. Rotkiewicz and W. Rettig 207 (1996) 85
- Solvatochromism and prototropic reactions of 2-quinoxalinone, S. Santra and S.K. Dogra 207 (1996) 103

Fluorescence spectroscopy

- Solvatochromism and prototropic reactions of 2-quinoxalinone, S. Santra and S.K. Dogra 207 (1996) 103
- Magnetic field effect of the fluorescence of gaseous NO₂ excited to the ²B₂ and ²B₁ states, V.I. Makarov and I.V. Khmelinskii 207 (1996) 115
- Specific solvent effects of linear alcohols on the emission spectrum and the excited state decay of tris(2,2'-bipyridyl) ruthenium(II), P. Hartmann, M.J.P. Leiner, S. Draxler and M.E. Lippitsch 207 (1996) 137
- Electric field-induced photoluminescence quenching in molecularly doped polymer light-emitting diodes, M. Deussen, P. Haring Bolivar, G. Wegmann, H. Kurz and H. Bässler 207 (1996) 147
- Spectroscopic density-matrix imaging and potential inversion: the rotational effect, M. Shapiro 207 (1996) 317

Photoelectron and Auger spectroscopy

- Study of the electronic structure of pyridine by synchrotron photoelectron spectroscopy, M.S. Moghaddam, A.D.O. Bawagan, K.H. Tan and W. von Niessen 207 (1996) 19
- Threshold photoelectrons coincidence spectroscopy of N_2^{2+} and CO^{2+} ions, M. Hochlaf, R.I. Hall, F. Penent, H. Kjeldsen, P. Lablanquie, M. Lavollée and J.H.D. Eland 207 (1996) 159
- Femtosecond time-resolved zero kinetic energy photoelectron and photoionization spectroscopy studies of I_2 wavepacket dynamics, I. Fischer, M.J.J. Vrakking, D.M. Villeneuve and A. Stolow 207 (1996) 331
- Zero kinetic energy photoelectron (ZEKE) spectroscopy of the heterotrimer phenol-water-argon: interaction between a hydrogen bond and a van der Waals bond, O. Dopfer, M. Melf and K. Müller-Dethlefs 207 (1996) 437

X-ray spectroscopy

- Colloidal structure and properties of bovine serum globulin aqueous systems using SAXS and rheological measurements, T. Matsumoto and H. Inoue 207 (1996) 167

Electron impact spectroscopy

- Studies of the electron density in the highest occupied molecular orbitals of PH_3 , PF_3 and $P(CH_3)_3$ by electron momentum spectroscopy and Hartree-Fock, MRSD-CI and DFT calculations, J. Rolke and C.E. Brion 207 (1996) 173

Laser methods

- Product state resolved stereodynamics. $O(^1D_2) + HCl \rightarrow OH(X^2\Pi_{1/2}; v=4, N=6) + Cl(^2P_J)$, A.J. Alexander, M. Brouard, S.P. Rayner and J.P. Simons 207 (1996) 215
- Reactions of Ca and Sr with CH_3X and CF_3X ($X = Br, I$). A laser-induced fluorescence study on nascent CaBr, SrBr, and SrI, F. Keijzer, J.M. Teule, J. Bulthuis, G.J. de Graaff, M.H. Hilgeman, M.H.M. Janssen, E.H. van Kleef, J.J. van Leuken and S. Stolte 207 (1996) 261
- Photodissociation of $ClONO_2$ at 193 and 248 nm, C.M. Nelson, T.A. Moore, M. Okumura and T.K. Minton 207 (1996) 287
- Reactive scattering of $CN + D_2$: the stereodynamics, D.-C. Che and K. Liu 207 (1996) 367
- Crossed molecular beam study of the $Cr(a^7S_3) + O_2(X^3\Sigma_g^-) \rightarrow CrO(X^5\Pi_g) + O(^3P_J)$ reaction, I.M. Hedgecock, C. Naulin and M. Costes 207 (1996) 379
- State specific, angle velocity resolved measurements of photodissociation in clusters: I atom escape from $(CH_3I)_n$ ($n = 1, 2, 3$), J.A. Syage 207 (1996) 411

Picosecond spectroscopy

- Electric field-induced photoluminescence quenching in molecularly doped polymer light-emitting diodes, M. Deussen, P. Haring Bolivar, G. Wegmann, H. Kurz and H. Bässler 207 (1996) 147

Synchrotron spectroscopies

- Study of the electronic structure of pyridine by synchrotron photoelectron spectroscopy, M.S. Moghaddam, A.D.O. Bawagan, K.H. Tan and W. von Niessen 207 (1996) 19

Atomic and molecular beam techniques

- State-to-state rate constants and rotational relaxation time in nitrogen, R.G. Sharafutdinov, A.E. Belikov, M.L. Strekalov and A.V. Storozhev 207 (1996) 193
- Role of migration in the dynamics of bromine atoms reacting with iodine molecules, J.J. Wang, D.J. Smith and R. Grice 207 (1996) 203

- F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. I. A high resolution crossed molecular beam experiment, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe, J.P. Toennies, F.J. Aoiz and L. Bañares 207 (1996) 227
- Photodissociation of ClONO₂ at 193 and 248 nm, C.M. Nelson, T.A. Moore, M. Okumura and T.K. Minton 207 (1996) 287
- Reactive scattering of CN + D₂: the stereodynamics, D.-C. Che and K. Liu 207 (1996) 367
- Crossed molecular beam study of the Cr(a⁷S₃) + O₂(X³Σ_g⁻) → CrO(X⁵Π_g) + O(³P₂) reaction, I.M. Hedgecock, C. Naulin and M. Costes 207 (1996) 379
- The dynamics of the reaction OH + D₂ → HOD + D: Crossed beam experiments and quantum mechanical scattering calculations on ab initio potential energy surfaces, M. Alagia, N. Balucani, P. Casavecchia, D. Stranges, G.G. Volpi, D.C. Clary, A. Kliesch and H.-J. Werner 207 (1996) 389
- A novel, simple rotational state analyser/selector for polar linear molecules, H.J. Loesch 207 (1996) 427
- Reaction dynamics of the Ca(¹D₂, ³P₁) + RI → CaI* + R (R = CH₃, C₂H₅ and n-C₃H₇) system: chemiluminescence, photon yield, electronic branching ratio and influence of the radical group, M. Garay, J.M. Orea and A. González Ureña 207 (1996) 451
- Time-resolved experiments*
- Formation and stabilization of twisted intramolecular charge transfer states in binary mixed solvents, G. Köhler, K. Rechthaler, K. Rotkiewicz and W. Rettig 207 (1996) 85
- Specific solvent effects of linear alcohols on the emission spectrum and the excited state decay of tris(2,2'-bipyridyl) ruthenium(II), P. Hartmann, M.J.P. Leiner, S. Draxler and M.E. Lippitsch 207 (1996) 137
- Femtosecond time-resolved zero kinetic energy photoelectron and photoionization spectroscopy studies of I₂ wavepacket dynamics, I. Fischer, M.J.J. Vrakking, D.M. Villeneuve and A. Stolow 207 (1996) 331
- Real-time dynamics of ammonia clusters excited through the \tilde{A} state: formation of the protonated cluster ions, E.M. Snyder, J. Purnell, S. Wei, S.A. Buzza and A.W. Castleman Jr. 207 (1996) 355
- Field emission and field ionization*
- Zero kinetic energy photoelectron (ZEKE) spectroscopy of the heterotrimer phenol-water-argon: interaction between a hydrogen bond and a van der Waals bond, O. Dopfer, M. Melf and K. Müller-Dethlefs 207 (1996) 437
- Measurement of macroscopic variables*
- Colloidal structure and properties of bovine serum globulin aqueous systems using SAXS and rheological measurements, T. Matsumoto and H. Inoue 207 (1996) 167
- Objects**
- Bulk systems**
- Gases*
- Magnetic field effect of the fluorescence of gaseous NO₂ excited to the ²B₂ and ²B₁ states, V.I. Makarov and I.V. Khmelinskii 207 (1996) 115
- Proton-transfer reaction dynamics, A. Douhal, F. Lahmani and A.H. Zewail 207 (1996) 477

Supersonic beams

- State-to-state rate constants and rotational relaxation time in nitrogen, R.G. Sharafutdinov, A.E. Belikov, M.L. Strekalov and A.V. Storozhev 207 (1996) 193
- Crossed molecular beam study of the $\text{Cr(a}^7\text{S}_3) + \text{O}_2(\text{X}^3\Sigma_g^-) \rightarrow \text{CrO}(\text{X}^5\Pi_g) + \text{O}(\text{P}_j)$ reaction, I.M. Hedgecock, C. Naulin and M. Costes 207 (1996) 379
- State specific, angle velocity resolved measurements of photodissociation in clusters: I atom escape from $(\text{CH}_3\text{I})_n$ ($n = 1, 2, 3$), J.A. Syage 207 (1996) 411
- A novel, simple rotational state analyser/selector for polar linear molecules, H.J. Loesch 207 (1996) 427
- Proton-transfer reaction dynamics, A. Douhal, F. Lahmani and A.H. Zewail 207 (1996) 477

Liquid mixtures and solutions

- Formation and stabilization of twisted intramolecular charge transfer states in binary mixed solvents, G. Köhler, K. Rechthaler, K. Rotkiewicz and W. Rettig 207 (1996) 85
- Specific solvent effects of linear alcohols on the emission spectrum and the excited state decay of tris(2,2'-bipyridyl) ruthenium(II), P. Hartmann, M.J.P. Leiner, S. Draxler and M.E. Lippitsch 207 (1996) 137

Glasses

- Spectral properties of cationic transients generated in γ -irradiated cyclohexyl bromide, M. Kołodziejcki and H. Abramczyk 207 (1996) 77

Polymers

- Electric field-induced photoluminescence quenching in molecularly doped polymer light-emitting diodes, M. Deussen, P. Haring Bolivar, G. Wegmann, H. Kurz and H. Bässler 207 (1996) 147

Biological systems

- Colloidal structure and properties of bovine serum globulin aqueous systems using SAXS and rheological measurements, T. Matsumoto and H. Inoue 207 (1996) 167

*Microscopic systems**Atoms*

- Role of migration in the dynamics of bromine atoms reacting with iodine molecules, J.J. Wang, D.J. Smith and R. Grice 207 (1996) 203
- Product state resolved stereodynamics. $\text{O}(\text{D}_2) + \text{HCl} \rightarrow \text{OH}(\text{X}^2\Pi_{1/2}; v = 4, N = 6) + \text{Cl}(\text{P}_j)$, A.J. Alexander, M. Brouard, S.P. Rayner and J.P. Simons 207 (1996) 215
- Reactions of Ca and Sr with CH_3X and CF_3X ($\text{X} = \text{Br}, \text{I}$). A laser-induced fluorescence study on nascent CaBr , SrBr , and SrI , F. Keijzer, J.M. Teule, J. Bulthuis, G.J. de Graaff, M.H. Hilgeman, M.H.M. Janssen, E.H. van Kleef, J.J. van Leuken and S. Stolte 207 (1996) 261

Molecules (neutral and ionic)

- Rotationally resolved photoelectron spectroscopy of the vanadium dimer, K. Wang and V. McKoy 207 (1996) 309
- Spectroscopic density-matrix imaging and potential inversion: the rotational effect, M. Shapiro 207 (1996) 317
- Reactive scattering of $\text{CN} + \text{D}_2$: the stereodynamics, D.-C. Che and K. Liu 207 (1996) 367

-diatomic

- Pseudopotential calculations for the potential energies of Ca^+-He and Ca^+-Ne , E. Czuchaj, F. Rebentrost, H. Stoll and H. Preuss 207 (1996) 51
- State-to-state rate constants and rotational relaxation time in nitrogen, R.G. Sharafutdinov, A.E. Belikov, M.L. Strelakov and A.V. Storozhev 207 (1996) 193
- Role of migration in the dynamics of bromine atoms reacting with iodine molecules, J.J. Wang, D.J. Smith and R. Grice 207 (1996) 203
- Product state resolved stereodynamics. $\text{O}(^1\text{D}_2) + \text{HCl} \rightarrow \text{OH}(\text{X } ^2\Pi_{1/2}; v=4, N=6) + \text{Cl}(^2\text{P}_j)$, A.J. Alexander, M. Brouard, S.P. Rayner and J.P. Simons 207 (1996) 215
- F- D_2 state resolved reactive scattering at 180 and 240 meV collision energies. I. A high resolution crossed molecular beam experiment, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe, J.P. Toennies, F.J. Aoiz and L. Bañares 207 (1996) 227
- F- D_2 state resolved reactive scattering at 180 and 240 meV collision energies. II. Quasi-classical cross sections. A comparison with the experimental results, F.J. Aoiz, L. Bañares, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe and J.P. Toennies 207 (1996) 245
- Rotationally resolved photoelectron spectroscopy of the vanadium dimer, K. Wang and V. McKoy 207 (1996) 309
- Femtosecond time-resolved zero kinetic energy photoelectron and photoionization spectroscopy studies of I_2 wavepacket dynamics, I. Fischer, M.J.J. Vrakking, D.M. Villeneuve and A. Stolow 207 (1996) 331
- A novel, simple rotational state analyser/selector for polar linear molecules, H.J. Loesch 207 (1996) 427
- Centrifugal-sudden hyperspherical study of $\text{Cl} + \text{HCl} \rightarrow \text{ClH} + \text{Cl}$ reaction dynamics on 'tight-bend' and 'loose-bend' potential energy surfaces, D. Sokolovski, J.N.L. Connor and G.C. Schatz 207 (1996) 461

-small polyatomics

- A theoretical investigation on the core processes of 1-alkenes, G. Fronzoni and A. Lisini 207 (1996) 1
- Singlet-triplet energy separation and barrier for ring closure for trimethylenemethane and its complexes, B. Ma and H.F. Schaefer III 207 (1996) 31
- Ab initio study of the electronic spectrum of Na_2F , Z.-L. Cai, G. Hirsch and R.J. Buenker 207 (1996) 43
- Beats in internal vibrational energy redistribution in trans-stilbene – a study of the quantum and classical correspondence, K. Bolton and S. Nordholm 207 (1996) 63
- Magnetic field effect of the fluorescence of gaseous NO_2 excited to the $^2\text{B}_2$ and $^2\text{B}_1$ states, V.I. Makarov and I.V. Khmelinskii 207 (1996) 115
- Studies of the electron density in the highest occupied molecular orbitals of PH_3 , PF_3 and $\text{P}(\text{CH}_3)_3$ by electron momentum spectroscopy and Hartree-Fock, MRSD-CI and DFT calculations, J. Rolke and C.E. Brion 207 (1996) 173
- Reactions of Ca and Sr with CH_3X and CF_3X ($\text{X} = \text{Br}, \text{I}$). A laser-induced fluorescence study on nascent CaBr , SrBr , and SrI , F. Keijzer, J.M. Teule, J. Bulthuis, G.J. de Graaff, M.H. Hilgeman, M.H.M. Janssen, E.H. van Kleef, J.J. van Leuken and S. Stolte 207 (1996) 261
- Photodissociation of ClONO_2 at 193 and 248 nm, C.M. Nelson, T.A. Moore, M. Okumura and T.K. Minton 207 (1996) 287

-aromatics

- Solvatochromism and prototropic reactions of 2-quinoxalinone, S. Santra and S.K. Dogra 207 (1996) 103

-polymeric and biological

- Colloidal structure and properties of bovine serum globulin aqueous systems using SAXS and rheological measurements, T. Matsumoto and H. Inoue 207 (1996) 167

Molecular aggregates

- Formation and stabilization of twisted intramolecular charge transfer states in binary mixed solvents, G. Köhler, K. Rechthaler, K. Rotkiewicz and W. Rettig 207 (1996) 85

-van der Waals molecules

- Zero kinetic energy photoelectron (ZEKE) spectroscopy of the heterotrimer phenol-water-argon: interaction between a hydrogen bond and a van der Waals bond, O. Dopfer, M. Melf and K. Müller-Dethlefs 207 (1996) 437

-clusters

- Real-time dynamics of ammonia clusters excited through the \tilde{A} state: formation of the protonated cluster ions, E.M. Snyder, J. Purnell, S. Wei, S.A. Buzza and A.W. Castleman Jr. 207 (1996) 355
- State specific, angle velocity resolved measurements of photodissociation in clusters: I atom escape from $(CH_3I)_n$ ($n = 1, 2, 3$), J.A. Syage 207 (1996) 411

Free radicals (including hydronium and muonium)

- Spectral properties of cationic transients generated in γ -irradiated cyclohexyl bromide, M. Kołodziejcki and H. Abramczyk 207 (1996) 77
- F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. I. A high resolution crossed molecular beam experiment, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe, J.P. Toennies, F.J. Aoiz and L. Bañares 207 (1996) 227
- F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. II. Quasi-classical cross sections. A comparison with the experimental results, F.J. Aoiz, L. Bañares, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe and J.P. Toennies 207 (1996) 245
- Reactive scattering of CN + D₂: the stereodynamics, D.-C. Che and K. Liu 207 (1996) 367
- The dynamics of the reaction OH + D₂ → HOD + D: Crossed beam experiments and quantum mechanical scattering calculations on ab initio potential energy surfaces, M. Alagia, N. Balucani, P. Casavecchia, D. Stranges, G.G. Volpi, D.C. Clary, A. Kliesch and H.-J. Werner 207 (1996) 389

Phenomena**Molecular structure**

- Ab initio study of the electronic spectrum of Na₂F, Z.-L. Cai, G. Hirsch and R.J. Buenker 207 (1996) 43
- Threshold photoelectrons coincidence spectroscopy of N₂²⁺ and CO²⁺ ions, M. Hochlaf, R.I. Hall, F. Penent, H. Kjeldsen, P. Lablanquie, M. Lavollée and J.H.D. Eland 207 (1996) 159
- Zero kinetic energy photoelectron (ZEKE) spectroscopy of the heterotrimer phenol-water-argon: interaction between a hydrogen bond and a van der Waals bond, O. Dopfer, M. Melf and K. Müller-Dethlefs 207 (1996) 437

Vibrations and rotations of molecules

- Threshold photoelectrons coincidence spectroscopy of N₂²⁺ and CO²⁺ ions, M. Hochlaf, R.I. Hall, F. Penent, H. Kjeldsen, P. Lablanquie, M. Lavollée and J.H.D. Eland 207 (1996) 159
- F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. I. A high resolution crossed molecular beam experiment, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe, J.P. Toennies, F.J. Aoiz and L. Bañares 207 (1996) 227

- Spectroscopic density-matrix imaging and potential inversion: the rotational effect, M. Shapiro 207 (1996) 317
- Femtosecond time-resolved zero kinetic energy photoelectron and photoionization spectroscopy studies of I_2 wavepacket dynamics, I. Fischer, M.J.J. Vrakking, D.M. Villeneuve and A. Stolow 207 (1996) 331
- Electronic structure and states*
- A theoretical investigation on the core processes of 1-alkenes, G. Fronzoni and A. Lisini 207 (1996) 1
- Study of the electronic structure of pyridine by synchrotron photoelectron spectroscopy, M.S. Moghaddam, A.D.O. Bawagan, K.H. Tan and W. von Niessen 207 (1996) 19
- Ab initio study of the electronic spectrum of Na_2F , Z.-L. Cai, G. Hirsch and R.J. Buenker 207 (1996) 43
- Pseudopotential calculations for the potential energies of Ca^+-He and Ca^+-Ne , E. Czuchaj, F. Rebentrost, H. Stoll and H. Preuss 207 (1996) 51
- Spectral properties of cationic transients generated in γ -irradiated cyclohexyl bromide, M. Kołodziejcki and H. Abramczyk 207 (1996) 77
- Threshold photoelectrons coincidence spectroscopy of N_2^{2+} and CO^{2+} ions, M. Hochlaf, R.I. Hall, F. Penent, H. Kjeldsen, P. Lablanquie, M. Lavollée and J.H.D. Eland 207 (1996) 159
- Studies of the electron density in the highest occupied molecular orbitals of PH_3 , PF_3 and $P(CH_3)_3$ by electron momentum spectroscopy and Hartree-Fock, MRSD-CI and DFT calculations, J. Rolke and C.E. Brion 207 (1996) 173
- Molecular interactions*
- Spectral properties of cationic transients generated in γ -irradiated cyclohexyl bromide, M. Kołodziejcki and H. Abramczyk 207 (1996) 77
- State specific, angle velocity resolved measurements of photodissociation in clusters: I atom escape from $(CH_3I)_n$ ($n = 1,2,3$), J.A. Syage 207 (1996) 411
- Spectral bandshapes and intensities*
- Ab initio study of the electronic spectrum of Na_2F , Z.-L. Cai, G. Hirsch and R.J. Buenker 207 (1996) 43
- Energy transfer processes*
- Beats in internal vibrational energy redistribution in trans-stilbene – a study of the quantum and classical correspondence, K. Bolton and S. Nordholm 207 (1996) 63
- State-to-state rate constants and rotational relaxation time in nitrogen, R.G. Sharafutdinov, A.E. Belikov, M.L. Strelakov and A.V. Storozhev 207 (1996) 193
- Reactions of Ca and Sr with CH_3X and CF_3X ($X = Br, I$). A laser-induced fluorescence study on nascent CaBr, SrBr, and SrI, F. Keijzer, J.M. Teule, J. Bulthuis, G.J. de Graaff, M.H. Hilgeman, M.H.M. Janssen, E.H. van Kleef, J.J. van Leuken and S. Stolte 207 (1996) 261
- Real-time dynamics of ammonia clusters excited through the \tilde{A} state: formation of the protonated cluster ions, E.M. Snyder, J. Purnell, S. Wei, S.A. Buzza and A.W. Castleman Jr. 207 (1996) 355
- Molecular photophysical processes*
- Magnetic field effect of the fluorescence of gaseous NO_2 excited to the 2B_2 and 2B_1 states, V.I. Makarov and I.V. Khmelinskii 207 (1996) 115
- Threshold photoelectrons coincidence spectroscopy of N_2^{2+} and CO^{2+} ions, M. Hochlaf, R.I. Hall, F. Penent, H. Kjeldsen, P. Lablanquie, M. Lavollée and J.H.D. Eland 207 (1996) 159

Intramolecular dynamics

- Beats in internal vibrational energy redistribution in trans-stilbene – a study of the quantum and classical correspondence, K. Bolton and S. Nordholm 207 (1996) 63

-radiationless transitions

- Specific solvent effects of linear alcohols on the emission spectrum and the excited state decay of tris(2,2'-bipyridyl) ruthenium(II), P. Hartmann, M.J.P. Leiner, S. Draxler and M.E. Lippitsch 207 (1996) 137

-vibrational energy redistribution (including vibrational dissociation)

- Beats in internal vibrational energy redistribution in trans-stilbene – a study of the quantum and classical correspondence, K. Bolton and S. Nordholm 207 (1996) 63
Proton-transfer reaction dynamics, A. Douhal, F. Lahmani and A.H. Zewail 207 (1996) 477

Luminescence spectra, yields and lifetimes

- Solvatochromism and prototropic reactions of 2-quinoxalinone, S. Santra and S.K. Dogra 207 (1996) 103
Specific solvent effects of linear alcohols on the emission spectrum and the excited state decay of tris(2,2'-bipyridyl) ruthenium(II), P. Hartmann, M.J.P. Leiner, S. Draxler and M.E. Lippitsch 207 (1996) 137
Spectroscopic density-matrix imaging and potential inversion: the rotational effect, M. Shapiro 207 (1996) 317
Reaction dynamics of the $\text{Ca}(^1\text{D}_2, ^3\text{P}_1) + \text{RI} \rightarrow \text{CaI}^* + \text{R}$ ($\text{R} = \text{CH}_3, \text{C}_2\text{H}_5$ and $n\text{-C}_3\text{H}_7$) system: chemiluminescence, photon yield, electronic branching ratio and influence of the radical group, M. Garay, J.M. Orea and A. González Ureña 207 (1996) 451

Reactions (including dissociation)

- Role of migration in the dynamics of bromine atoms reacting with iodine molecules, J.J. Wang, D.J. Smith and R. Grice 207 (1996) 203

-gas phase

- Product state resolved stereodynamics. $\text{O}(^1\text{D}_2) + \text{HCl} \rightarrow \text{OH}(X^2\Pi_{1/2}; \nu = 4, N = 6) + \text{Cl}(^2\text{P}_y)$, A.J. Alexander, M. Brouard, S.P. Rayner and J.P. Simons 207 (1996) 215
F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. I. A high resolution crossed molecular beam experiment, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe, J.P. Toennies, F.J. Aoiz and L. Bañares 207 (1996) 227
F-D₂ state resolved reactive scattering at 180 and 240 meV collision energies. II. Quasi-classical cross sections. A comparison with the experimental results, F.J. Aoiz, L. Bañares, M. Faubel, B. Martínez-Haya, L.Y. Rusin, U. Tappe and J.P. Toennies 207 (1996) 245
Reactions of Ca and Sr with CH_3X and CF_3X ($\text{X} = \text{Br}, \text{I}$). A laser-induced fluorescence study on nascent CaBr, SrBr, and SrI, F. Keijzer, J.M. Teule, J. Bulthuis, G.J. de Graaff, M.H. Hilgeman, M.H.M. Janssen, E.H. van Kleef, J.J. van Leuken and S. Stolte 207 (1996) 261
Photodissociation of ClONO_2 at 193 and 248 nm, C.M. Nelson, T.A. Moore, M. Okumura and T.K. Minton 207 (1996) 287
Real-time dynamics of ammonia clusters excited through the $\tilde{\text{A}}$ state: formation of the protonated cluster ions, E.M. Snyder, J. Purnell, S. Wei, S.A. Buzza and A.W. Castleman Jr. 207 (1996) 355
Reactive scattering of $\text{CN} + \text{D}_2$: the stereodynamics, D.-C. Che and K. Liu 207 (1996) 367

- Crossed molecular beam study of the $\text{Cr}(\text{a}^7\text{S}_3) + \text{O}_2(\text{X}^3\Sigma_g^-) \rightarrow \text{CrO}(\text{X}^5\Pi_g) + \text{O}(\text{P}_j)$ reaction, I.M. Hedgecock, C. Naulin and M. Costes 207 (1996) 379
- The dynamics of the reaction $\text{OH} + \text{D}_2 \rightarrow \text{HOD} + \text{D}$: Crossed beam experiments and quantum mechanical scattering calculations on ab initio potential energy surfaces, M. Alagia, N. Balucani, P. Casavecchia, D. Stranges, G.G. Volpi, D.C. Clary, A. Kliesch and H.-J. Werner 207 (1996) 389
- Centrifugal-sudden hyperspherical study of $\text{Cl} + \text{HCl} \rightarrow \text{ClH} + \text{Cl}$ reaction dynamics on 'tight-bend' and 'loose-bend' potential energy surfaces, D. Sokolovski, J.N.L. Connor and G.C. Schatz 207 (1996) 461
- Tunnelling*
- Proton-transfer reaction dynamics, A. Douhal, F. Lahmani and A.H. Zewail 207 (1996) 477
- Electron transfer*
- Formation and stabilization of twisted intramolecular charge transfer states in binary mixed solvents, G. Köhler, K. Rechthaler, K. Rotkiewicz and W. Rettig 207 (1996) 85
- Electric field-induced photoluminescence quenching in molecularly doped polymer light-emitting diodes, M. Deussen, P. Haring Bolivar, G. Wegmann, H. Kurz and H. Bässler 207 (1996) 147
- Ionization (including Rydberg states)*
- A theoretical investigation on the core processes of 1-alkenes, G. Fronzoni and A. Lisini 207 (1996) 1
- Rotationally resolved photoelectron spectroscopy of the vanadium dimer, K. Wang and V. McKoy 207 (1996) 309
- Femtosecond time-resolved zero kinetic energy photoelectron and photoionization spectroscopy studies of I_2 wavepacket dynamics, I. Fischer, M.J.J. Vrakking, D.M. Villeneuve and A. Stolow 207 (1996) 331
- Real-time dynamics of ammonia clusters excited through the $\tilde{\text{A}}$ state: formation of the protonated cluster ions, E.M. Snyder, J. Purnell, S. Wei, S.A. Buzza and A.W. Castleman Jr. 207 (1996) 355
- Structure of solids and liquids*
- Colloidal structure and properties of bovine serum globulin aqueous systems using SAXS and rheological measurements, T. Matsumoto and H. Inoue 207 (1996) 167

